

FUJH 16.361 (100794-11286)
09/398,106In the Claims:

1. (currently amended) A synchronization protecting and setting system for signals received in a radio base station comprising:

a first means for generating a first ~~synchronized word~~ detecting window, which covers a position of a ~~synchronized word~~ predetermined pattern provided in a reception signal received at the radio base station;

a second means for generating a second ~~synchronized word~~ detecting window, which covers the position of the ~~synchronized word~~ predetermined pattern within the first ~~synchronized word~~ detecting window;

a means for detecting the ~~synchronized word~~ predetermined pattern in the first or second ~~synchronized word~~ detecting window; and

a control means for resetting the position of the second ~~synchronized word~~ detecting window relative to the first ~~synchronized word~~ detecting window under a predetermined condition;

wherein synchronization is detected by checking coincidence of the reception signal with the predetermined pattern in the first detecting window at a first frame and the detecting means detects synchronization in the set second detecting window at a subsequent frame.

2. (cancelled)

3. (currently amended) The system according to claim 1,

wherein the ~~synchronized word~~ predetermined pattern is formed of plural bits, and the control means resets the position of the second ~~synchronized word~~ detecting window, when a

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bit error rate of the ~~synchronized word~~ predetermined pattern is more than a predetermined value,
as the predetermined condition.

3/ 4. (currently amended) The system according to claim 1,

wherein the reception signal further includes a color code formed of plural bits,

and the control means resets the position of the second ~~synchronized word~~ detecting window,
when a bit error rate of the color code is more than a predetermined value, as the predetermined
condition.

4/ 5. (currently amended) The system according to claim 1,

wherein the control means resets the position of the second ~~synchronized word~~
detecting window, when an average amount of phase difference in the number of frames of the
signals received in the radio base station is more than a predetermined value, as the
predetermined condition.

5/ 6. (currently amended) The system according to claim 1,

wherein the control means resets the position of the second ~~synchronized word~~
detecting window, when the result of BCH decoding for signals received in the radio base station
is mistaken, as the predetermined condition.

6/ 7. (currently amended) The system according to claim 1,

wherein the control means resets the position of the second ~~synchronized word~~
detecting window, when the result of CRC arithmetic for signals received in the radio base
station is mistaken, as the predetermined condition.

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7/ 8. (currently amended) The system according to claim 1,

wherein the control means resets the position of the second ~~synchronized word~~ detecting window, when a level of the signal received in the radio base station is less than a predetermined value, as the predetermined condition.

9. (currently amended) A synchronization protecting and setting method for signals received in a radio base station comprising the steps of:

generating a first ~~synchronized word~~ detecting window, which covers a position of a ~~synchronized word~~ predetermined pattern provided in a reception signal received at the radio base station;

generating a second ~~synchronized word~~ detecting window, which covers the position of the ~~synchronized word~~ predetermined pattern within the first ~~synchronized word~~ detecting window;

detecting the ~~synchronized word~~ predetermined pattern in the first or second ~~synchronized word~~ detecting window; and

resetting the position of the second ~~synchronized word~~ detecting window as related to the first ~~synchronized word~~ detecting window under a predetermined condition;

wherein synchronization is detected by checking coincidence of the reception signal with the predetermined pattern in the first detecting window at a first frame, the detecting means detects synchronization in the set second detecting window at a subsequent frame.

a 10. (previously amended) A synchronization apparatus provided in a radio base station comprising:

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a first window generator for generating a first synchronized word detecting window, which covers a position of a synchronized word provided in a reception signal received at the radio base station;

a synchronized word detector for detecting a synchronized word present in a received signal within the first synchronized word detecting window and outputting a synchronized word detecting pulse;

a second window generator for generating a second synchronized word detecting window, which covers the position of the synchronized word detected by the synchronized word detector as is within the same time period as the first synchronized word detecting window;

a pulse generator for outputting a detecting pulse according to an AND condition of the synchronized word detecting pulse and the second synchronized word detecting window;
and

a register for resetting the position of the second synchronized word detecting window as related to the first synchronized word detecting window under a predetermined condition.

11. (currently amended) A synchronization protecting and setting method for received signals, comprising the steps of:

~~detecting a synchronized word~~ synchronization by checking coincidence of a reception signal with a predetermined pattern in a first ~~synchronized word detecting~~ window at the a frame at first;

setting a position of a second ~~synchronized word detecting~~ window, based on the detection of the ~~synchronized word result~~ in the first ~~synchronized word detecting~~ window, the

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second ~~synchronized word~~ detecting window being narrower than the first ~~synchronized~~
detecting window; and

detecting the ~~synchronized word~~ synchronization in the set second ~~synchronized~~
~~word~~ detecting window at a subsequent frame, and

changing said setting position of the second detecting window based on a
receiving condition.